

**Provisional Projections of the State Population
By Age, Gender and Race/Ethnicity:
2000-2030
September 2003**

Race, minority, and ethnic estimates and forecasts should be interpreted with caution. Census data on race and ethnic status are based on respondents' self-identification. This identification can change between censuses for people who might claim membership in more than one group. Definitions and collection procedures have also changed. This limits the reliability of birth, death, and migration trends used to develop population forecasts. These projections are provisional and will be revised when the migration data from Census 2000 is evaluated and when the Office of Financial Management's long range state population forecast is revised in November 2003.

About This Report

This report includes population projections of Washington State by age, gender and race/ethnic groups for five-year intervals for the period 2000 - 2030. These numbers are based on Census 2000 and projected forward using the cohort component method. Assumptions are made for future fertility, life expectancy, net migration, and immigration levels. The projections for race/ethnicity are also developed within a framework provided by the state population forecast published in November 2002. The projected components of change for each race/ethnic groups are compared and reconciled with the state population forecast at every five-year time interval between 2005-2030. The race/ethnic categories adhere to those defined by the federal Office of Management of Budget (OMB) in 1997. The single exclusive race categories are used. For example, White category refers to people who select only "White" on the census form. Due to input data limitations, Asian and Native Hawaiian and Pacific Islander (NHOPI) categories are combined into Asian and Pacific Islanders (API) category. The multiracial population is projected as one group named "Two or More Races".

Trend of Population Growth: 2000 to 2030

The total state population is projected to grow by 42.2 percent from 5,894,121 in 2000 to about 8,379,500 in 2030. The race/ethnic composition of the population is projected to change in the future as the Black, Asian/Pacific Islander, Multiracial and Hispanic populations increase in proportion to the total population.

- The Hispanic population is the fastest growing among all the race/ethnic groups. Its population is expected to grow 150 percent, from 441,509 in 2000 to about 1,107,600 in 2030.
- The most rapidly growing racial group is two or more race category, which may have an increase of 160 percent. Its population is projected to grow from 160,500 in 2000 to 419,500 in 2030.
- Asian and Pacific Islanders population is projected to have an increase of 74.2 percent to reach approximately 620,000 by the year 2030.

- The Black population is expected to reach 283,200 by 2030 – a 42.2 percent increase from 199,200 in 2000.
- The American Indian, and Alaska Native population is projected to increase 61.6 percent, from 96,933 in 2000 to 156,600 by 2030.
- The White population is projected to grow from 5081,700 to about 6,900,200 – a 35.8 percent increase.

Washington State Population Change By Race/Ethnicity (in Thousands):

	RACE						ETHNICITY
	TOTAL	White	Black	AIAN	API	Two or More	Hispanic Origin
2000	5,894.1	5,081.7	199.2	96.9	355.8	160.5	441.5
2010	6,649.8	5,633.3	227.9	115.2	451.3	222.0	626.3
2020	7,547.3	6,302.4	257.0	136.8	543.1	308.0	851.8
2030	8,379.5	6,900.2	283.2	156.6	620.0	419.5	1,107.6

Percent Change per Every Five Year Interval:

2010	12.82	10.85	14.41	18.87	26.85	38.35	41.87
2020	13.50	11.88	12.78	18.73	20.32	38.71	36.00
2030	11.03	9.49	10.20	14.47	14.16	36.21	30.03

Growth 2000-2030

Number	2,485.4	1,818.5	84.1	59.7	264.2	259.0	666.1
Percent	42.17	35.79	42.21	61.55	74.24	161.40	150.86

Data Comparability Issue

In 1997, OMB undertook a comprehensive review of the categories for data on race and ethnicity. As a result of this review, OMB decided to revise the existing Standards for the Classification of Federal Data on Race and Ethnicity. The fundamental changes between the 1977 Directive 15 and the 1977 revisions are:

1. **The Pacific Islanders are separated from Asians.**
2. **Respondents are allowed to mark more than one race.**

The population projections by race/ethnicity are developed in OMB's new race/ethnicity minimum categories. Due to data limitations, Asian and Native Hawaiian and Pacific Islanders are combined into one category (API). Hence, the projections are produced in five categories: White, Black, American Indian and Alaska Native (AIAN), API, and Two or More races. The projection for each group is developed separately, taking into account fertility, mortality, migration histories, and expectations specific to each race/ethnic group. The benchmark year data for these projections is the Census 2000 Modified Race data file, which has allocated "Some Other Race" group into the above mentioned race categories. The five major racial groups sum to the state totals. Hispanic origin is considered an ethnic group, not a race. Therefore, persons of

Hispanic origin may be of any race, and are tabulated separately from the race categories in this report.

Most of other state and federal agencies whose data are used in these projections, for example, vital statistics data, were not able to reconfigure their system to comply with OMB new categories until after 2003. The real challenge for these projections is how to bridge the race data from various sources with inconsistent classifications. National Center for Health Statistics (NCHS) produced a set of estimates of census 2000 counts in OMB old race categories. These estimates are used to bridge the gap between base year population and the input data in the projection process with some adjustment. The reason for the adjustment is that NCHS estimates were based on national level information. Analysis has found that the allocation of the “Two or More Races” based on national data was not very representative for certain race and age specific groups in Washington.

Methodology

The projection is produced with the cohort component accounting system:

$$P_1 = P_0 + B_{t-t+5} - D_{t-t+5} + M_{t-t+5}$$

Where: P_1 = population at the end of the period

P_0 = population at the beginning of the period

B_{t-t+5} = births during the period

D_{t-t+5} = deaths during the period

M_{t-t+5} = net migration during the period

Each component is projected separately and controlled within the framework of the state population forecast. Details about the fertility, mortality and migration assumptions are described in the following sections.

Since all the key input data items are still in OMB’s old race categories, preliminary projections are benchmarked with NCHS estimates of 2000. This is to accommodate the inconsistent race categories between census 2000 and the input data. Then, the racial distribution of “two or more races” was projected independently. The projections of OMB new race categories are derived by subtracting the “Two or More Races” from the preliminary projections.

Fertility Assumptions for Race/Ethnic Groups

Based on national and state trends and fertility surveys results, there is no indication that high fertility rates will return. Hispanic women show a much higher fertility rates currently. But, it is assumed that once they enter the main stream of American life, they will adopt the life style of women as a whole. Their fertility rates will decline in the future. For this projection, age specific fertility rates (ASFR) by race are calculated for 1995 to 2000 period. The ASFR forms the basis for the forecast of fertility for each race/ethnic group. The sum of all ASFRs across ages for a given period is the total fertility rates (TFR), which indicates the number of children each woman can expect to have by the end of her childbearing years. The race/ethnicity specific TFRs are controlled by the state fertility forecasts, which expect no dramatic fertility increase or decrease. For the long-range projections, the child-woman ratio (children under 5 to women 15-49) is also used to adjust the fertility rates for projections after 2015. Although the TFRs for the total

population and for the various race/ethnic groups are not expected to increase dramatically, the Asian and Hispanic populations are still expected to have large numbers of births. This is because both groups have a relatively large increase of women at the childbearing age over the forecast horizon.

Mortality Assumptions for Race/Ethnic Groups

The state forecasts by race and ethnic groups project the mortality rates based on the Bureau of the Census projections of steady but slow increase in life expectancy. Women are expected to live longer than men. This assumption is held true across all the race/ethnic groups. Though the life expectancy increases, the number of people in older age groups also increases, thus higher numbers of deaths results. The white population has the largest number of deaths, because this is the largest racial group and comprises a relatively high percent of elderly people where the mortality is high.

It is assumed that Washington mortality patterns follow those of the nation. The 2000 race/ethnicity specific life tables constructed by NCHS are used in conjunction with Census Bureau's National projection dated in 1999. The 2000 number of deaths by five-year age group and by race/ethnicity is from the state Department of Health. Once the probability of each age specific population cohort surviving to the next age group is calculated, these values are used to estimate the mortality rates, which then are used to calculate the deaths for each projection year.

Migration Assumptions for Race/Ethnic Groups

International migration and domestic migration are projected separately. This is because some of the racial and ethnic groups have immigration volumes that are larger or smaller than those found in the White population. According to the 2000 census, nearly 61 percent of the API populations are foreign born. There were large volumes of API immigrants in the 1980 and early 1990 periods. The rippling effects of those immigrants will continue for probably another decade. Then immigration from Asian countries is assumed to progressively decrease, due to the rapid economic growth in Asian countries. In 2000, 38 percent of Hispanic population was foreign born. The Hispanic population is projected to continue to have constant level of net immigration over the projection horizon. The total number of future domestic migrants is developed within the net migration framework of the state forecast.